

Transforming the Resilience of Cognitive, Cyber-physical Systems

Statement of Themes: Symposia dedicated to promising research in resilient systems that will protect critical cyber-physical infrastructures from unexpected and malicious threats--securing our way of life.

Special/Invite Announcement & Call for Papers

Session S/I-02:

Resilience Models and Measures

Session Abstract:

Quantifying cyber security has been a core challenge for the information assurance community for decades and the same difficulties apply to devising metrics for resilience. While resilience mechanisms have started to become available as reusable and configurable building blocks, we lack reliable metrics for measuring the usefulness of deploying resiliency mechanisms, especially under varying adversary models. The purpose of this special session is to present new ideas and approaches for quantifying security and resilience from a multi-disciplinary perspective, bringing together the cyber, physical, and human components involved in the process. In order to facilitate and promote a lively and engaging session, a simple cyber-physical-human will be presented as the baseline problem to contextualize the paper presentation and follow-up discussions. Topics of interest for the special session include both theoretical and applied research on security and resilience metrics, characterization and measurements frameworks for resilience and cybersecurity, and case studies.

Chairs:

- Dr. Marco Carvalho, Florida Institute of Technology
- Michael Atighetchi, BBN; Anarita Giana, GE Global

Authors' Schedule:

• Paper submission deadline: April 4, 2016 Notification of acceptance: June 13, 2016

Paper Submission:

Papers must be submitted electronically through the electronic submission system. For further details please consult the conference web pages for the paper template.

Contact Information

Resilience Week

Craig Rieger, Idaho National Laboratory Jodi Grgich, Idaho National Laboratory

Control Symposium

Frank Ferrese, Naval Sea Systems Command David Scheidt, Johns Hopkins University

Cyber Symposium

Marco Carvalho, Florida Institute of Technology Michael Atighetchi, BBN Annarita Giani, GE Global

Cognitive Symposium

Ron Boring, Idaho National Laboratory Roger Lew, University of Idaho Nathan Lau, Virginia Tech

Communication Symposium

James Sterbenz, The University of Kansas Jie Wu, Temple University

www.resilienceweek.com





